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Table. 1: Release update for IMS RbR requirements

RBR_id	req_ key	Rel	Req_ Category	segment	req_type	s_verif_ method	s_verif_ stat	a_verif_ method	a_verif _stat	CCR	text	interpretatio n text	clarification
IMS- 0010#B	8524	<u>B0</u>	mission essential	SDPS	procedural	inspection	un- verified	inspection	un- verified	96- 1465B	The IMS shall be capable of providing 24 hour per day, 7 day per week access to the ECS services.		ECS shall meet this requirement by inspection of applicable test results from RMA requirements EOSD3900 through EOSD4020.
IMS- 0020#B	4918	<u>B0B1</u>	mission essential	SDPS	functional	demo	un- verified	demo			The IMS shall always be accessible to users and an informational status message describing the current availability status of ECS services and the predicted time for resumption of services which are temporarily unavailable shall be provided.		
IMS- 0030#B	8406	<u>B0B1</u>	mission essential	SDPS	functional	demo	un- verified	demo	un- verified	96- 1479A	The IMS shall provide from each ECS access node, access to the full range of services spanning the whole of ECS, including data and services available from	B: LIM/DIM capability	

RBR_id	req_ key	Rel	Req_ Category	segment	req_type	s_verif_ method	s_verif_ stat	a_verif_ method	a_verif stat	CCR	text	interpretatio n text	clarification
											all DAACs without requiring that the user know the physical location of the data.		
IMS- 0040#B	4929	<u>B0B1</u>	mission critical	SDPS	interface	test	un- verified	test	un- verified	97- 0276A	The IMS shall verify user authorization by validation of inputs with information as supplied by the SMC.		
IMS- 0050#B	8543	<u>B0</u>	mission essential	SDPS	functional	test	un- verified	test	un- verified	96- 1465B	The IMS shall provide the capability for users to define and modify user profile information, to include at a minimum: a. User electronic address b. Data distribution media c. Data distribution address d. User expertise level e. Default query parameters f. Terminal characteristics g. Technical specialty.	'Define' means input values to user profile information.	
IMS- 0060#B	4933	<u>B0</u>	mission critical	SDPS	security	test	un- verified	test			The IMS shall, when creating ECS user accounts, request registration		

RBR_id	req_	Rel	Req_	segment	req_type	s_verif_	s_verif_	a_verif_	a_verif	CCR	text	interpretatio	clarification
	key		Category			method	stat	method	_stat		approval, user account priorities, and authorized user services from the SMC.	n text	
IMS- 0070#B	4935	<u>B0</u>	mission essential	SDPS	interface	demo	un- verified	demo			The IMS shall provide the user with initial system access procedures, priority information, and authorized services as maintained in the SMC.		
IMS- 0080#B	4938	<u>B0</u>	mission essential	SDPS	security	inspection	un- verified	inspection			The IMS shall maintain a list of authorized ECS services for each user and shall update the list with information supplied by the SMC.		
IMS- 0085#B	4939	<u>B0</u>	mission essential	SDPS	security	inspection	un- verified	inspection			The IMS shall provide unregistered users access to ECS services as authorized by the SMC.		
IMS- 0090#B	8165	_B0 _B0B1	mission essential mission	SDPS SDPS	interface interface	inspection inspection	un- verified	inspection	un- verified	96- 1213A	The IMS shall be accessible to users via, at a minimum: a. Direct connection b. DELETED c. Network link		

RBR_id	req_	Rel	Req_	segment	req_type	s_verif_		a_verif_	a_verif	CCR	text	interpretatio	clarification
0100#B	key 4947		Category essential			method	stat verified	method	_stat		The IMS shall	n text	
0100#B	+2+7		essential				Verified				support, at a minimum: a. Interactive sessions b. Non-interactive remote sessions c. Client-server interface d. Simulated sessions for training purposes		
IMS- 0110#B	6668	<u>B0B1</u>	mission essential	SDPS	functional	inspection	un- verified	inspection	un- verified	96- 0919A	The IMS user interface shall support access to ECS services from the personal computers and workstations of the general user community, without requiring them to install IMS client software.		
IMS- 0120#B	8545	<u>B0B1</u>	mission essential	SDPS	functional	inspection	un- verified	inspection	un- verified	97- 0443B	The IMS shall provide, dependent upon the user's display device capabilities, a user-friendly interface with the following features at a minimum: a. Multiple window display b. Buttons and pull down menus c. Valid lists for all variables d. An information		

RBR_id	req_	Rel	Req_ Category	segment	req_type	s_verif_	s_verif_		a_verif	CCR	text	interpretatio	clarification
KBK_id	req_ key	Kel	Req_Category		req_type	s_verif_ method	s_verif_ stat	a_verif_ method	a_verif _stat	CCR	base of associations between variables (e.g., between instruments and geophysical parameters) e. Ability to restore a session after interruption f. Context-sensitive help g. Minimal and consistent use of non-standard keys h. Random movement through fields i. Capability to save and restore the contents of a menu or form j. Standardized use of commands and terminology across screens k. Self-explanatory, meaningful error messages l. Automatic acronym expansion, which can be enabled and disabled interactively m. Availability of a menu tree diagram n. Command language	interpretation text	clarification
IMS- 0130#B	4980	<u>B0B1</u>	mission critical	SDPS	security	demo	un- verified	demo			The IMS shall verify that a user is		

RBR_id	req_ key	Rel	Req_ Category	segment	req_type	s_verif_ method	s_verif_ stat	a_verif_ method	a_verif _stat	CCR	text	interpretatio n text	clarification
W.43		20212								25	authorized to access a particular IMS service before providing the service to the user.		
IMS- 0140#B	4984	<u>B0B1B</u>	mission fulfillmen t	SDPS	functional	demo	un- verified	demo	un- verified	97- 0225A	The IMS shall provide the capability for multiple simultaneous sessions _ for example, the capability to transition back and forth smoothly between directory search, inventory search, inventory search, and data visualization. For example, when viewing a directory entry, the user shall have easy access to the corresponding guide (documentation/refe rence material) and inventory information.		
IMS- 0150#B	4991	<u>B0</u>	mission fulfillmen t	SDPS	security	demo	un- verified	demo			The IMS shall supply a uniform user interface for access to the following at a minimum: a. Heterogeneous data sets b. Communications networks		

RBR_id		Rel	Req_	segment	req_type	s_verif_	s_verif_	a_verif_	a_verif	CCR	text	interpretatio	clarification
	key		Category			method	stat	method	_stat		c. Data bases that are geographically dispersed d. Multi-disciplined directories and inventories	n text	
IMS- 0160#B	8828	<u>B0B1</u>	mission essential	SDPS	functional	demo	un- verified	demo	un- verified	96- 1476A	The IMS shall provide levels of user interaction support to include at a minimum: a. Expert (e.g., quick command driven direct information input) b. Intermediate (e.g., some prompting and automatically supplied help) c. Novice (e.g., extensive prompting and help facilities)	Levels of user interaction are set with options in the user profile by the user.	
IMS- 0170#B	4995	<u>B0</u>	mission fulfillmen t	SDPS	evolvable	analysis	un- verified	analysis			The IMS user interface shall be designed so that restructuring of the IMS data bases shall not result in the need for changes to the IMS interface.		
IMS- 0180#B	4997	<u>B0</u>	mission fulfillmen t	SDPS	functional	demo	un- verified	demo			The IMS shall extract relevant data from the user profile information and display as default values.		

RBR_id	req_	Rel	Req_	segment	req_type		s_verif_		a_verif	CCR	text	interpretatio	clarification
	key		Category			method	stat	method	_stat			n text	
IMS- 0190#B	4998	_B0B1	mission essential	SDPS	functional	demo	un- verified	demo			The IMS shall provide the capability to save information selected in prior metadata searches for use in subsequent IMS service requests, either in the current session or in future sessions.		
IMS- 0210#B	5003	<u>B0B1</u>	mission critical	SDPS	security	demo	un- verified	demo			The IMS shall allow data access privileges to be configurable by user and data type for: a. Read b. Write c. Update d. Delete e. Any combination of the above		
IMS- 0220#B	5011	<u>B0B1</u>	mission essential	SDPS	functional	demo	un- verified	demo			The IMS shall store, maintain and provide data management services for ECS directory, inventory, and guide (documentation/reference material) and other IMS data bases.		
IMS- 0230#B	5017	<u>B0B1</u>	mission critical	SDPS	security	demo	un- verified	demo			The IMS shall restrict update of		

RBR_id	req_ key	Rel	Req_ Category	segment	req_type	s_verif_ method	s_verif_ stat	a_verif_ method	a_verif _stat	CCR	text	interpretatio n text	clarification
	Rey		Caregory			monsus.	Section	memou	_5		ECS directory, inventory, and guide (documentation/refe rence material) and other IMS data bases to authorized users based on the users access privileges.		
IMS- 0240#B	5033	<u>B0B1</u>	mission critical	SDPS	functional	demo	un- verified	demo			The IMS shall provide, at a minimum, data base administration utilities for: a. Modifying the data base schema b. Performance monitoring c. Performance tuning d. Administration of user access control e. On-line incremental backup f. On-line recovery g. Export/import of data		
IMS- 0250#B	5042	<u>B0</u>	mission essential	SDPS	functional	demo	un- verified	demo			The IMS shall provide required maintenance of the IMS data bases, to include at a minimum: a. Capability to restructure the data base b. Capability to interrupt a		

RBR_id	req_ key	Rel	Req_ Category	segment	req_type	s_verif_ method	s_verif_ stat	a_verif_ method	a_verif stat	CCR	text	interpretatio n text	clarification
	Rey		Category			methou	stat	method	_3441		maintenance session and restart the session without loss of information	n text	
IMS- 0260#B	5050	<u>B0B1</u>	mission essential	SDPS	functional	demo	un- verified	demo			The IMS shall provide interactive and batch information management capabilities for authorized users to add, update, delete, and retrieve information from the IMS data bases.		
IMS- 0270#B	5058	<u>B0B</u>	mission essential	SDPS	functional	demo	un- verified	demo			IMS shall maintain information on the science processing library holdings and provide the capability for users to search for and order science processing library software.		
IMS- 0280#B	8177	<u>B0</u>	mission critical	SDPS	interface	demo	un- verified	demo	un- verified	96- 1208	The IMS shall maintain DAR generation information, for example, instrument information received from the ICC and spacecraft information received from the EOC, in a data base	B: ASTER GDS interfaces to EDC DAAC only.	

RBR_id	req_ key	Rel	Req_ Category	segment	req_type	s_verif_ method	s_verif_ stat	a_verif_ method	a_verif stat	CCR	text	interpretatio n text	clarification
			,,								which will be accessible during the DAR planning and submittal process.		
IMS- 0290#B	5060	<u>B0B1</u>	mission fulfillmen t	SDPS	functional	analysis	un- verified	analysis			IMS internal data base management queries shall be expressed in a standard query language.		
IMS- 0300#B	5062	<u>B0B1</u>	mission essential	SDPS	functional	inspection	un- verified	inspection			The IMS shall maintain a log of all information update activity.		
IMS- 0320#B	5063	<u>B0B1</u>	mission essential	SDPS	functional	inspection	un- verified	inspection			Standard Product related metadata shall contain, at a minimum: a. Keywords and glossary from investigators b. Keywords, synonyms, and glossary for crossproduct and crossdirectory referencing c. Identifiers for locating products in the DADS archive by granule d. Documentation on algorithms, including version history, authors, written description of product,		

RBR_id	req_	Rel	Req_	segment	req_type	s_verif_		a_verif_	a_verif	CCR	text	interpretatio	clarification
	key		Category			method	stat	method	_stat			n text	
											equations, and		
											references		
											e. Documentation		
											on instrument(s)		
											and spacecraft(s)		
											including history of		
											housekeeping and		
											ancillary		
											parameters,		
											discipline		
											characterization,		
											calibration		
											parameters, key		
											individuals, and		
											references		
											f. Identifiers,		
											algorithms, written		
											descriptions,		
											equations, authors,		
											and references		
											associated with		
											static browse		
											products and		
											subsetted,		
											subsampled, and		
											summary data		
											products		
											g. Published papers,		
											research results,		
											significant results,		
											and references by		
											author and date		
											h. Key organizations	1	
											and personnel for all		
											product-related	1	
											DAACs, ADCs, and		
											ODCs		
											i. Granule-specific		
											information as listed		
											in Tables C-10 and		
	1	<u> </u>		J]	J			l	C-11 in Appendix C	L	

RBR_id	req_	Rel	Req_	segment	req_type	s_verif_ method	s_verif_	a_verif_ method	a_verif _stat	CCR	text	interpretatio n text	clarification
IMS-	key	<u>B0</u>	Category mission	SDPS	functional	demo	stat un-	demo	_stat			n text	
0330#B	5065		essential		Tunctional	dellio	verified				The metadata maintained by the IMS shall provide a cross reference that relates science data to the following at a minimum: a. Calibration data, navigation data, and instrument engineering data b. Processing algorithms used for data generation at the PGS c. Software used for data generation at the PGS d. Parameters used for data generation at the PGS e. Input data used for data generation at the PGS e. Input data used for data generation at the PGS f. Data recipients g. The PGS at which the data was processed h. QA and validation data, reports, and algorithms		
IMS- 0340#B	8559	<u>B0</u>	mission essential	SDPS	functional	inspection	un- verified	inspection	un- verified	96- 1465B	The metadata maintained by the IMS shall contain content-based summary information,		Metadata as provided by the science processing software.

RBR_id	req_	Rel	Req_	segment	req_type	s_verif_	s_verif_	a_verif_	a_verif	CCR	text	interpretatio	clarification
	key		Category			method	stat	method	_stat		including statistical summaries and granule features, for all ECS standard and special products.	n text	
IMS- 0350#B	5074	<u>B0B1</u>	mission critical	SDPS	security	inspection	un- verified	inspection			The IMS shall provide the capability for authorized personnel to add, delete, or modify ECS metadata entries, individually or in groups.		
IMS- 0355#B	5079	_B0B1	mission fulfillmen t	SDPS	functional	analysis	un- verified	analysis			The metadata shall be expandable to include additional attributes which are identified during the mission and deemed useful for data search.		
IMS- 0356#B	5081	<u>B0</u>	mission fulfillmen t	SDPS	interface	analysis	un- verified	analysis			The IMS shall provide a mechanism to create and update directory entries on EOSDIS data sets and forward directory entries in the appropriate format to the Global Change Master Directory.		Non-ECS implies GCMD
IMS- 0360#B	5084	<u>B0</u>	mission essential	SDPS	interface	demo	un- verified	demo			The IMS shall		

IMS- 0390#B BO	CCR text	a_verif CCR	a_verif_ method	s_verif_ stat	s_verif_ method	req_type	segment	Req_ Category	Rel	req_ key	RBR_id
0380#B 8563 essential essential verified verified verified 0340C The IMS shaprovide the capability to exchange did data with IP centers, AD selected OD IMS-0390#B 5087 mission essential SDPS interface demo verified The IMS shapination or access to dientries for a sets accessithrough the search and of service. IMS- B1 mission SDPS functional demo undemo	directory of information, which may be geographically distributed, that describes whole data sets in the Earth science							J		,	
0390#B 5087 essential verified The IMS shi maintain or access to disentries for a sets accessis through the search and of service. IMS- B1 mission SDPS functional demo undemo	0340C The IMS shall		demo		demo			essential		8563	0380#B
	The IMS shall maintain or provide access to directory entries for all data sets accessible through the IMS search and order service.		demo		demo	interface	SDPS		<u>B0B1</u>	5087	
maintain an guide (documentai /reference n that provide information	(documentation /reference material) that provides information about individual EOSDIS data sets.			un- verified				essential		5089	0410#B

RBR_id	req_	Rel	Req_	segment	req_type	s_verif_		a_verif_	a_verif	CCR	text	interpretatio	clarification
	key		Category			method	stat	method	_stat			n text	
0415#B	5090		essential				verified		verified	0407A	The IMS shall provide the ability to access and present (dependent on the user's display device capabilities) guide information which includes graphics and hypertext, derivable from suitably structured documents, as well as plain text documents.		
IMS- 0420#B	8565	<u>B0B1</u>	mission essential	SDPS	functional	demo	un- verified	demo	un- verified	96- 1465B	The IMS on-line guide (documentation /reference material) shall provide or, where appropriate, contain references to such information as: a. Documentation of processing algorithms used for EOS and other Earth science data products generated by the ECS b. Results of science data quality assessments of EOS data c. Bibliography of published and unpublished literature (as available) derived	As applicable to the data set	

RBR_id	req_ key	Rel	Req_ Category	segment	req_type	s_verif_ method	s_verif_ stat	a_verif_ method	a_verif _stat	CCR	text	interpretatio n text	clarification
											from the project d. Cross references between differing studies of the same data e. Other documents relevant to quality assessment of EOS data f. Product specifications g. Instrument specifications h. Summaries of data sets derived from observation logs i. Format options available for the given data set j. Subsetting, subsampling, and transformation options available for the given data set k. Inventory search options available for the given data set		
IMS- 0430#B	5093	<u>B0</u>	mission essential	SDPS	functional	analysis	un- verified	analysis			The IMS shall maintain an on-line inventory with information that individually describes each granule of EOSDIS data, where granule refers to the minimum traceable logical unit of data stored		

RBR_id	req_	Rel	Req_	segment	req_type	s_verif_	s_verif_		a_verif	CCR	text	interpretatio	clarification
	key		Category			method	stat	method	_stat		in the archives, as defined by the instrument science team.	n text	
IMS- 0440#B	5095	<u>B1</u>	mission essential	SDPS	functional	demo	un- verified	demo			The IMS shall maintain information that describes spacecraft housekeeping and ancillary data parameters stored in the archives.		
IMS- 0450#B	5102	<u>B0</u>	mission essential	SDPS	functional	test	un- verified	test			The IMS shall accept and validate new and updated metadata for all ECS archive data which has been ingested at the DADS.		
IMS- 0455#B	5112	<u>B0B1</u>	mission essential	SDPS	functional	test	un- verified	test			The IMS shall accept and validate new metadata from the DADS reflecting changes as a result of: a. Purges b. Transfers c. Unexpected loss d. Restoration of data after recovery from loss		
IMS- 0460#B	5117	<u>B0</u>	mission fulfillmen t	SDPS	functional	demo	un- verified	demo			The IMS shall provide the capability to accept metadata problem reports from		

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RBR_id	req_ key	Rel	Req_ Category	segment	req_type	s_verif_ method	s_verif_ stat	a_verif_ method	a_verif stat	CCR	text	interpretatio n text	clarification
	RCy		Category			method	Stat	method	Stat		users, and inform the PGS quality assurance staff of the problem.	II text	
IMS- 0480#B	5120	<u>B0B1</u>	mission essential	SDPS	functional	demo	un- verified	demo			The IMS shall allow the user to store documents in the ECS.		
IMS- 0490#B	8569	<u>B1</u>	mission essential	SDPS	standards	demo	un- verified	demo	un- verified	96- 1465B	The IMS shall provide the capability to ingest documentation in a number of digital text formats, at a minimum the following: a. ASCII text b. Microsoft WORD c. HTML d. Interleaf e. Postscript f. WordPerfect		B: It is applicable for any documentati on which is supported by Ingest, including the guide documentati on.
IMS- 0500#B	8575	B0B1	mission essential	SDPS	functional	demo	un- verified	demo	un- verified	97- 0407A	The IMS shall provide access to information to include at a minimum: a. Metadata b. Spacecraft housekeeping and ancillary data information c. Engineering data d. EOC historical data e. Data acquisition plans and schedules		The term plan and schedule are the same. Candidate plans are provided through document server.

RBR_id	req_	Rel	Req_	segment	req_type	s_verif_	s_verif_	a_verif_	a_verif	CCR	text	interpretatio	clarification
	key		Category			method	stat	method	_stat			n text	
											f. Processing schedules g. Documentation h. ESDIS Project Policies and Procedures obtained from SMC data base i. Science Processing Library software j. Documentation on data format and metadata standards		
IMS- 0510#B	8382	B0B1	mission essential	SDPS	interface	demo	un- verified	demo	un- verified	97- 0407A	The IMS shall provide tools for research planning and data search, to include at a minimum: a. Data acquisition schedules and plans b. The capability to map specified geophysical parameters to the appropriate instrument and/or Standard Product c. Descriptive information on instruments and geophysical parameters available in Standard Products d. Climatology information e. Phenomenology information		

RBR_id	req_ key	Rel	Req_ Category	segment	req_type	s_verif_ method	s_verif_ stat	a_verif_ method	a_verif stat	CCR	text	interpretatio n text	clarification
	Rey		Cutegory			memou	See	memou	_5444		f. Geographic reference aids g. Spacecraft location projections.	T CAC	
IMS- 0530#B	5133	<u>B0B1</u>	mission essential	SDPS	functional	demo	un- verified	demo			The IMS shall provide document text search.		
IMS- 0535#B	5135	<u>B0B1</u>	mission fulfillmen t	SDPS	functional	demo	un- verified	demo			The IMS shall support hierarchical searching of suitably structured documents.		
IMS- 0540#B	5138	<u>B1</u>	mission fulfillmen t	SDPS	functional	demo	un- verified	demo			The IMS shall display PGS system processing schedules to users.		
IMS- 0545#B	8383	<u>B0</u>	mission fulfillmen t	SDPS	functional	demo	un- verified	demo	partially verified	96- 1344A	The IMS shall provide the capability to search a product's processing history.		
IMS- 0550#B	5142	<u>B0B1</u>	mission fulfillmen t	SDPS	functional	demo	un- verified	demo	un- verified	97- 0407A	The IMS shall allow a user to locate and identify desired data without detailed knowledge of the ECSs: a. Architecture b. Data Base management system c. Data Base structure d. Query languages e. Data formats		
IMS- 0560#B	5157	<u>B0B1</u>	mission fulfillmen t	SDPS	functional	demo	un- verified	demo	un- verified	97- 0407A	The IMS shall decompose complex		

RBR_id	req_ key	Rel	Req_ Category	segment	req_type	s_verif_ method	s_verif_ stat	a_verif_ method	a_verif _stat	CCR	text	interpretatio n text	clarification
	Rey		Category			method	stat	method	_stat		data base search requests into executable data base queries in a manner which is transparent to the user.	II text	
IMS- 0570#B	5166	<u>B0B1</u>	mission fulfillmen t	SDPS	functional	demo	un- verified	demo			The IMS shall provide an incremental search capability.		
IMS- 0575#B	8830	<u>B0B1</u>	mission essential	SDPS	functional	demo	un- verified	demo	un- verified	96- 1476A	The IMS shall provide the capability to search across multiple data sets for coincident occurrences of data in space and/or time and any other attribute(s) of metadata.		
IMS- 0580#B	5173	B0B1	mission essential	SDPS	functional	demo	un- verified	demo	un- verified	97- 0532A	The IMS shall provide geographic and geophysical (e.g. ocean bathymetry surface features) overlays to aid in the selection of spatial data and to enhance the display of metadata.		
IMS- 0590#B	5174	<u>B0</u>	mission essential	SDPS	functional	demo	un- verified	demo			The IMS shall provide the capability to		

RBR_id	req_	Rel	Req_	segment	req_type	s_verif_	s_verif_	a_verif_ method	a_verif	CCR	text	interpretatio	clarification
	key		Category			method	stat	тегноа	_stat		distribute information: a. On-line (i.e., over a network) b. Off-line (hardcopy or offline data media).	n text	
IMS- 0600#B	5175	<u>B0B1</u>	mission essential	SDPS	interface	demo	un- verified	demo	un- verified	97- 0340C	The IMS shall provide the capability to search a directory of information that describes whole EOSDIS, non-EOSDIS, and ADC earth science data sets.		
IMS- 0610#B	5176	<u>B0B1</u>	mission essential	SDPS	functional	demo	un- verified	demo			The IMS shall provide the capability to search the data inventory which describes each granule of EOSDIS data.		
IMS- 0620#B	8588	<u>B0B1</u>	mission essential	SDPS	interface	demo	un- verified	demo	un- verified	96- 1465B	The IMS shall provide access to inventories of selected ODCs and ADCs via level II and level III catalog interoperability as specified in ICDs.		For Release B, the CLS is providing access to ODC/ADC services via the Gateway.
IMS- 0625#B	8401	<u>B0B1</u>	mission fulfillmen t	SDPS	interface	demo	un- verified	demo	un- verified	96- 1479A	The IMS shall provide bi-directional interoperability	B: Full capability	

RBR_id	req_ key	Rel	Req_ Category	segment	req_type	s_verif_ method	s_verif_ stat	a_verif_ method	a_verif stat	CCR	text	interpretatio n text	clarification
	Rey		Category			method	stat	method	Stat		between ECS and V0 for access to the inventory metadata, guide information, and browse products via level III catalog interoperability as specified in ICDs.	n text	
IMS- 0630#B	5184	B0B1	mission essential	SDPS	functional	test	un- verified	test	un- verified	97- 0532A	The IMS shall provide the capability to select metadata for retrieval by: a. Boolean operators b. Relational operators c. Attribute values d. Search strings e. Combinations thereof		
IMS- 0640#B	8990	<u>B0B1</u>	mission essential	SDPS	functional	test	un- verified	test	un- verified	97- 0532A	The IMS shall provide the capability to query geographic metadata by any of the following criteria at a minimum: a. Geographic reference b. Data element content (as specified in metadata) c. Minimum bounding rectangle d. Point and radius		

RBR_id	req_	Rel	Req_	segment	req_type	s_verif_		a_verif_ method	a_verif	CCR	text	interpretatio	clarification
	key		Category			method	stat	method	_stat		e. Polygon f. Geographic name (based on a standard data base, such as USGS Geographic Names Information System) g. WRS h. Any combination that allows for specification of multilpe, distinct geographic areas	n text	
IMS- 0650#B	8989	<u>B0B1</u>	mission essential	SDPS	functional	test	un- verified	test	un- verified	97- 0055	The IMS shall query non-geographic metadata by any of the following criteria at a minimum: a. Exact word match b. Phrase match c. Character set (string) d. Wildcard construct (prefix, embedded, suffix) e. Character range f. Min/max range search g. And combinations of the above with Logical and Boolean operators		
IMS- 0660#B	5190	_B0B1	mission essential	SDPS	functional	test	un- verified	test			The IMS shall provide inventory metadata search based on any combination of the core (Table C-		

RBR_id	req_	Rel	Req_	segment	req_type	s_verif_	s_verif_	a_verif_	a_verif	CCR	text	interpretatio	clarification
	key		Category			method	stat	method	_stat			n text	
											10, Appendix C) and where applicable dataset-specific (Table C-11, Appendix C) inventory metadata attributes and geophysical parameters at a minimum.		
IMS- 0665#B	5192	<u>B0B1</u>	mission essential	SDPS	functional	demo	un- verified	demo			The IMS shall provide informational messages to indicate that a query is being executed, and shall provide the capability for the user to abort any time-intensive operations.		
IMS- 0670#B	8832	<u>B0B1</u>	mission essential	SDPS	functional	demo	un- verified	demo	un- verified	97- 0276A	The IMS shall provide the capability to accept, validate, and fill orders from users for periodic delivery of information stored at the IMS.	This capability is provided by the Subscription service.	
IMS- 0680#B	8834	B0B1	mission essential mission	SDPS SDPS	functional functional	demo	un- verified	demo	un- verified	96- 1476A	The IMS shall provide data order capabilities integrated with metadata search capabilities.	The Data Order capability is provided by Product Request.	

RBR_id	req_ key	Rel	Req_ Category	segment	req_type	s_verif_ method	s_verif_ stat	a_verif_ method	a_verif stat	CCR	text	interpretatio n text	clarification
0690#B	5201		essential			memou	verified	method	_544		The IMS shall provide the capability to visualize pre-order data products and metadata (e.g. coverage maps, summary data) to facilitate the data selection and ordering process.	II CAL	
IMS- 0700#B	8836	<u>B1</u>	mission essential	SDPS	functional	demo	un- verified	demo	un- verified	96- 1476A	The IMS shall provide the capability for users to request subsetted, subsampled, and summary data products, which have been processed at the PGS during the routine production processing and archived at the DADS, whenever associated inventory information is displayed.	The request for these capabilities is via a Data Retrieval Request on a browse product.	
IMS- 0705#B	8001	<u>B0B1</u>	mission essential	SDPS	functional	demo	un- verified	demo	un- verified	97- 0225A	The IMS shall provide the capability to request a subset (ie. scene) of a Landsat 7 subinterval identified by: a. WRS b. Geographic location (x,,z)		

RBR_id	req_ key	Rel	Req_ Category	segment	req_type	s_verif_ method	s_verif_ stat	a_verif_ method	a_verif stat	CCR	text	interpretatio n text	clarification
	Key		Category			method	stat	methou	_stat		spatial with rectangular boundries c. Spectral Band d. Time	H text	
IMS- 0720#B	5206	<u>B1</u>	mission essential	SDPS	functional	test	un- verified	test			The IMS shall provide the capability to request data products which are processed ad hoc in response to user requests for subsetting, subsampling, or averaging within a granule based on defined criteria to include: a. Geographical location (x, y, z - spatial with rectangular boundaries) b. Spectral band c. Time d. WRS		
IMS- 0730#B	8837	<u>B1</u>	mission fulfillmen t	SDPS	functional	demo	un- verified	demo	un- verified	96- 1476A	The IMS shall, using information supplied by the DADS, provide the user an estimate of how long it will take before subsetted, subsampled, and summary data products are ready for visualization.	Estimates will be for processing time only.	

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RBR_id	req_ key	Rel	Req_ Category	segment	req_type	s_verif_ method	s_verif_ stat	a_verif_ method	a_verif stat	CCR	text	interpretatio n text	clarification
IMS- 0740#B	8596	_B0B1	mission essential	SDPS	functional	demo	un- verified	demo	un- verified	96- 1465B	The IMS shall provide the capability for users to generate and update requests for one-time orders or standing orders for the DADS to distribute DADS archive holdings to include, at a minimum, Standard Products, Standard Product software, EOC historical data, spacecraft housekeeping and ancillary data, and engineering data.	II text	Users interface to DAAC operators via email or telephone who place subscription requests on part of users. Update subscription requests are done by deletions of original or submit of new. The one time order cancel and change occurs privately only via operator.
IMS- 0750#B	8840	<u>B0</u>	mission fulfillmen t	SDPS	functional	demo	un- verified	demo	un- verified	96- 1476A	The IMS shall provide the capability for the user to order Standard Product software and associated documentation in accordance with EOSDIS distribution criteria.	Ordering is done by Product Request.	
IMS- 0760#B	8608	<u>B0</u>	mission essential	SDPS	security	test	un- verified	test	un- verified	96- 1465B	The IMS shall access distribution criteria for each		Distribution criteria is data access rights.

RBR_id	req_ key	Rel	Req_ Category	segment	req_type	s_verif_ method	s_verif_ stat	a_verif_ method	a_verif stat	CCR	text	interpretatio n text	clarification
	Rey		Category			memou	State	memod	_stat		data product and data product software and compare the distribution criteria to the requester's data access rights to verify that the data and software can be distributed as requested.	ii text	
IMS- 0770#B	8842	<u>B0B1</u>	mission essential	SDPS	functional	test	un- verified	test	un- verified	96- 1476A	The IMS shall allow users to formulate a data order based on any combination of the inventory core metadata attributes and geophysical parameters at a minimum.	Data Orders are limited to combinations allowed by data inventory search results.	
IMS- 0780#B	5217	<u>B0</u>	mission essential	SDPS	interface	test	un- verified	test			The IMS shall accept and validate from the ECS users, IPs, ADCs, and ODCs requests for ECS archival data products.	B: ASTER (IP) REQUESTS FOR ECS PRODUCTS; ASTER GDS interfaces to EDC DAAC only.	
IMS- 0790#B	5218	<u>B0</u>	mission essential	SDPS	functional	test	un- verified	test			The IMS shall determine the location of requested data products and submit the product order to the data center where the data are archived.		

RBR_id	req_	Rel	Req_	segment	req_type	s_verif_	s_verif_	a_verif_	a_verif	CCR	text	interpretatio	clarification
T) (C	key	D.O.	Category	appa	C .: 1	method	stat	method	_stat	0.6		n text	
IMS- 0800#B	8846	<u>B0</u>	mission fulfillmen t	SDPS	functional	demo	un- verified	demo	un- verified	96- 1476A	The IMS shall determine the amount of data expected to be returned as the result of the product order and provide the information to the requester.		
IMS- 0810#B	5222	<u>B0B</u>	mission essential	SDPS	functional	test	un- verified	test			The IMS shall prepare, for output to the DADS, product orders to retrieve specified data from the archive and distribute it, which contains the following information at a minimum: a. Requester identification b. Data type c. Data set identifier d. Data set subsetting instructions e. Data formats f. Distribution instructions, including media requirements g. Request priority h. Suggested earliest start time i. Suggested latest completion time		

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RBR_id	req_	Rel	Req_	segment	req_type	s_verif_	s_verif_		a_verif	CCR	text	interpretatio n toyt	clarification
IMS- 0820#B	5225	<u>B0</u>	mission essential	SDPS	functional	test	un- verified	method test	_stat		The IMS shall provide to the user product order status information from the	n text	
											DADS to confirm or reject an order, which contains the following information at a minimum: a. Requester identification b. Request identification c. Request status d. If rejection, then the reason for the rejection e. If delayed longer than latest completion time specified by user, adjusted start and completion times		
IMS- 0830#B	8847	<u>B1</u>	mission essential	SDPS	functional	test	un- verified	test	un- verified	96- 1476A	The IMS shall, using information provided by the DADS, notify users when products will not be distributed within the estimated time, and provide the reason for the delay and modified arrival times.	User will be notified by email.	
IMS- 0840#B	8850	<u>B1</u>	mission essential	SDPS	functional	demo	un- verified	demo	un- verified	96- 1476A	The IMS shall provide the capability to	Users will be notified by email.	

RBR_id	req_ key	Rel	Req_ Category	segment	req_type	s_verif_ method	s_verif_ stat	a_verif_ method	a_verif stat	CCR	text	interpretatio n text	clarification
	Rey		Category			methou	stat	inctiou	_stat		receive data order status from the DADS when the ordered data has been shipped to the user.		
IMS- 0860#B	8402	B0B1	mission essential	SDPS	interface	demo	un- verified	demo	un- verified	96- 1479A	The IMS shall provide an interface to ADC and ODC data systems and archives that produce, process, and/or maintain Earth science data sets and that have agreed to make the information and services available to ECS.	B: NOAA, CIESIN	
IMS- 0870#B	5235	<u>B0</u>	mission essential	SDPS	security	test	un- verified	test			The IMS shall provide access in accordance with MOUs to ADC and ODC data that a. Has been generated by ADC and ODC data systems b. Is stored by ADC and ODC archives and requested by EOSDIS users c. Is required as ancillary data for production processing		
IMS- 0880#B	8611	<u>B0</u>	mission essential	SDPS	interface	test	un- verified	test	un- verified	96- 1465B	The IMS shall provide an interface	DADS in support of PDPS only	

RBR_id		Rel	Req_	segment	req_type	s_verif_		a_verif_	a_verif	CCR	text	interpretatio	clarification
	key		Category			method	stat	method	stat		to the ADC and ODC archives for ordering data to be delivered directly to the user or to a DADS.	n text	
IMS- 0890#B	8615	<u>B0</u>	mission essential	SDPS	functional	test	un- verified	test	un- verified	96- 1465B	The IMS shall provide the capability to receive the metadata from the DADS when ADC or ODC data has been ingested into the ECS archives.	Ancillary data from the ADC, to store in archive	
IMS- 0900#B	8854	<u>B0</u>	mission essential	SDPS	interface	test	un- verified	test	un- verified	96- 1476A	The IMS shall provide an interface to the IPs for ordering data to be delivered directly to the user or to a DADS.	B: ECS REQUEST TO ASTER (IP) FOR PRODUCTS B: ASTER GDS interfaces to EDC DAAC only. IP data ordering is done by Product Request.	
IMS- 0910#B	5244	<u>B0</u>	mission essential	SDPS	functional	test	un- verified	test			he IMS shall provide the capability to receive the metadata from the DADS, when IP data has been ingested into	B: ASTER GDS interfaces to EDC DAAC only.	

RBR_id	req_ key	Rel	Req_ Category	segment	req_type	s_verif_ method	s_verif_ stat	a_verif_ method	a_verif _stat	CCR	text	interpretatio n text	clarification
	кеу		Category			шетноа	Stat	шетноа	Stat		the EOSDIS	n text	
											archives.		
IMS- 0915#B	5249	<u>B0</u>	mission essential	SDPS	interface	test	un- verified	test			The IMS shall provide an interface to the Version 0 system for ordering data products to be		
											delivered directly to the user, or as		
73.60		2024		~~~~							specified in ICDs.		
IMS- 0920#B	5252	<u>B0B1</u>	mission essential	SDPS	functional	test	un- verified	test			The IMS shall provide the capability for users to construct and submit standing orders and one-time requests for processing of ECS data by pre-existing processes, which shall contain the following information at a minimum: a. Requester identification b. Algorithm input requirements c. Text description of need for processing d. Level 0-4 data set/subset e. Required time of generation f. Requested priority for product		

RBR_id	req_ key	Rel	Req_ Category	segment	req_type	s_verif_ method	s_verif_ stat	a_verif_ method	a_verif _stat	CCR	text	interpretatio n text	clarification
	ney		cutegory			memou	Seat	memou	_5&&		g. Resulting product type h. Processing parameters	A cons	
IMS- 0925#B	8856	<u>B1</u>	mission essential	SDPS	functional	test	un- verified	test	un- verified	96- 1476A	The IMS shall provide the capability for users to construct a Product Order associated with a Product Processing Order.	Product Order represented by Product Request. Product Processing Order represented by Data Processing Request.	
IMS- 0930#B	5256	<u>B0B1</u>	mission essential	SDPS	functional	test	un- verified	test			The IMS shall provide the capability to search metadata holdings for the purpose of identifying the product desired and the input data to be processed.		
IMS- 0940#B	8859	<u>B0</u>	mission essential	SDPS	functional	test	un- verified	test	un- verified	96- 1476A	The IMS shall integrate the searching of metadata holdings for identifying information needed to complete a processing request into the request construction and submission process.	A Processing Request is represented by a Data Processing Request.	
IMS- 0950#B	5267	<u>B1</u>	mission essential	SDPS	functional	test	un- verified	test			The IMS shall accept from the originator changes		

RBR_id	req_ key	Rel	Req_ Category	segment	req_type	s_verif_ method	s_verif_ stat	a_verif_ method	a_verif _stat	CCR	text	interpretatio n text	clarification
											to existing standing orders for data to be processed by the PGS.		
IMS- 0960#B	8861	<u>B1</u>	mission essential	SDPS	functional	test	un- verified	test	un- verified	96- 1476A	The IMS shall provide the capability to request priority processing of requested data.	Data Processing Requests incorporate priority processing.	
IMS- 0970#B	5277	<u>B0B1</u>	mission essential	SDPS	functional	test	un- verified	test			The IMS shall determine if requested data products already exist and can be retrieved.		
IMS- 0980#B	5278	<u>B1</u>	mission essential	SDPS	functional	test	un- verified	test			The IMS shall determine the necessary processing required to generate a requested product.		
IMS- 0990#B	5279	<u>B0</u>	mission essential	SDPS	functional	test	un- verified	test			The IMS shall determine if necessary lower level products exist for processing of the requested data product.		
IMS- 1000#B	8626	<u>B0</u>	mission essential	SDPS	functional	test	un- verified	test	un- verified	96- 1465B	The IMS shall prepare, for output to the PGS, the Product Processing Order for specifying processing and data	B: On- Demand processing interface for users.	ecs operation staff shall input the items noted for product processing. Item b. is

RBR_id	req_ key	Rel	Req_ Category	segment	req_type	s_verif_ method	s_verif_ stat	a_verif_ method	a_verif stat	CCR	text	interpretatio n text	clarification
											to be used in generating a product, which shall contain the following information at a minimum: a. Identification of the product(s) to be generated b. Identification of the expected time/time window of receipt of input products, and ancillary data c. Product processing priority d. Destination(s) of product output e. Suggested earliest start time f. Suggested latest completion time		ECS self generated based on product processing rules. Item d. the product output destination is determined when the PGE undergoes Science Software Integration & Test (SSI&T). Item e. is determined by item b., item c. and other pending production requests.
IMS- 1005#B	5281	<u>B0B1</u>	mission essential	SDPS	functional	test	un- verified	test			The IMS shall forward, to the appropriate DADS, Product Orders for distribution of the products generated as a result of the Product Processing Order.		
IMS- 1010#B	8864	<u>B1</u>	mission essential	SDPS	functional	test	un- verified	test	un- verified	96- 1476A	he IMS shall accept from the PGS a	Interaction with user for processing	

RBR_id	req_ key	Rel	Req_ Category	segment	req_type	s_verif_ method	s_verif_ stat	a_verif_ method	a_verif stat	CCR	text	interpretatio n text	clarification
	Rey					method	stat	inctitou	_sur		processing status message to confirm or reject a processing order, which shall contain the following information at a minimum: a. Requester identification b. Request identification c. Request status d. If rejection, then the reason for the rejection e. If delayed longer than latest completion time specified by user, adjusted start and completion times.	status messages done by the Product Status Dialog.	
IMS- 1020#B	8868	<u>B1</u>	mission critical	SDPS	interface	test	un- verified	test	un- verified	96- 1476A	The IMS shall prepare, for output to the SMC, a request for conflict adjudication in the event a processing conflict cannot be resolved between the IMS, the requester, and the PGS.	Conflict adjudication among elements/seg ments are handled by Product Status Dialog information messaging.	
IMS- 1030#B	8873	<u>B1</u>	mission essential	SDPS	interface	test	un- verified	test	un- verified	96- 1476A	The IMS shall accept from the SMC and provide to the requester,	Conflict adjudication among elements/seg ments are	

RBR_id	req_	Rel	Req_	segment	req_type	s_verif_	s_verif_		a_verif	CCR	text	interpretatio	clarification
	key		Category		- cq_t, pc	method	stat	method	_stat		conflict resolution, which shall contain the following information at a minimum: a. Request identification b. Data type c. Priority modifications d. Account balance modifications e. Information on when request will be serviced	n text handled by Product Status Dialog information messaging.	
IMS- 1040#B	8876	<u>B1</u>	mission essential	SDPS	functional	test	un- verified	test	un- verified	96- 1476A	f. SMC contact point The IMS shall, using information provided by the PGS, notify users when processing will not be completed within the estimated time, and provide the reason for the delay and modified arrival times.	Conflict adjudication among elements/seg ments are handled by Product Status Dialog information messaging.	
IMS- 1050#B	5288	<u>B1</u>	mission fulfillmen t	SDPS	functional	demo	un- verified	demo			The IMS shall provide the capability to notify the user community if data has been reprocessed.		
IMS- 1060#B	8537	<u>B0</u>	mission essential	SDPS	functional	test	un- verified	test	un- verified	97- 0019	The IMS shall maintain a cross reference of		

RBR_id	req_	Rel	Req_	segment	req_type	s_verif_	s_verif_		a_verif	CCR	text	interpretatio	clarification
	key		Category			method	stat	method	_stat		processing performed, data sets produced, supporting data used, and data recipient.	n text	
IMS- 1070#B	8243	<u>B0</u>	mission critical	SDPS	functional	demo	un- verified	demo	un- verified	96- 1220B	The IMS shall provide the capability for users to construct DARS for collection of ASTER instrument data which shall contain information as listed in the ASTER IRD.		
IMS- 1071#B	5292	<u>B1</u>	mission essential	SDPS	functional	demo	un- verified	demo			The IMS shall provide the capability for users to construct a Product Order associated with a Data Acquisition Request.		
IMS- 1072#B	5294	<u>B1</u>	mission essential	SDPS	functional	demo	un- verified	demo			The IMS shall provide the capability for users to construct a Product Processing Order associated with a Data Acquisition Request.		
IMS- 1080#B	8880	<u>B0B1</u>	mission critical	SDPS	functional	demo	un- verified	demo	un- verified	96- 1476A	The IMS shall accept requests for acquisition of data to be processed one	Data Processing Requests handle one time and	

RBR_id	req_	Rel	Req_	segment	req_type	s_verif_	s_verif_		a_verif	CCR	text	interpretatio	clarification
	key		Category			method	stat	method	_stat		time or	n text standing	
											as standing orders.	orders.	
IMS- 1090#B	8883	<u>B0</u>	mission critical	SDPS	interface	demo	un- verified	demo	un- verified	96- 1476A	The IMS shall accept requests for changes to existing ASTER DARs from the requester and forward the changes to the ASTER GDS.	ASTER GDS interfaces to EDC DAAC only.	
IMS- 1100#B	5299	<u>B0</u>	mission essential	SDPS	interface	test	un- verified	test			The IMS shall accept from the EOC the current data acquisition schedules and plans and make the data acquisition schedules and plans accessible to authorized users on request.		
IMS- 1105#B	5301	<u>B0</u>	mission essential	SDPS	interface	test	un- verified	test			The IMS shall maintain or provide access to climatology databases for DAR generation.		
IMS- 1130#B	6251	<u>B0B1</u>	mission essential	SDPS	functional	test	un- verified	test	un- verified		The IMS shall provide descriptive information on instruments and parameters available in Standard Products to help with the creation of data acquisition requests for the ASTER.		

RBR_id	req_ key	Rel	Req_ Category	segment	req_type	s_verif_ method	s_verif_ stat	a_verif_ method	a_verif stat	CCR	text	interpretatio n text	clarification
IMS- 1140#B	8244	<u>B0B1</u>	mission essential	SDPS	functional	demo	un- verified	demo	un- verified	96- 1220B	The IMS shall provide ASTER instrument specific graphic displays to help with the creation of data acquisition requests, which shall include at a minimum: a. Geographic reference aids b. Spacecraft location projections		
IMS- 1150#B	5309	<u>B1</u>	mission essential	SDPS	functional	test	un- verified	test			The IMS shall provide product specific help to identify instruments needed to create a product.		
IMS- 1160#B	5310	<u>B0</u>	mission essential	SDPS	functional	inspection	un- verified	inspection			The IMS shall provide instrument specific default settings for instrument configurable parameters.		
IMS- 1170#B	5312	<u>B0</u>	mission essential	SDPS	functional	test	un- verified	test			The IMS shall provide instrument specific help to assist with setting instrument parameters.		
IMS- 1180#B	5314	<u>B0</u>	mission critical	SDPS	functional	test	un- verified	test			The IMS shall validate that user specified instrument settings are within		

RBR_id	req_ key	Rel	Req_ Category	segment	req_type	s_verif_ method	s_verif_ stat	a_verif_ method	a_verif stat	CCR	text	interpretatio n text	clarification
	ž								_		the range of acceptable values.		
IMS- 1190#B	6253	<u>B0</u>	mission critical	SDPS	interface	test	un- verified	test	un- verified		The IMS shall validate DAR parameters against EOC provided constraints.		
IMS- 1195#B	5317	<u>B0</u>	mission critical	SDPS	interface	test	un- verified	test			The IMS shall validate DAR parameters against constraints provided by external instrument operations facilities (e.g. ASTER) as applicable and in accordance with applicable MOUs.		
IMS- 1210#B	5319	<u>B1</u>	mission essential	SDPS	functional	test	un- verified	test			The IMS shall forward the processing product orders associated with a DAR to the appropriate PGS.		
IMS- 1220#B	5320	<u>B1</u>	mission essential	SDPS	interface	test	un- verified	test			The IMS shall forward, to the appropriate DADS, product orders for distribution of the products generated as a result of the DAR.		
IMS- 1230#B	6257	<u>B0B1</u>	mission critical	SDPS	functional	test	un- verified	test	un- verified		The IMS shall accept from the ASTER GDS and provide to the		

RBR_id		Rel	Req_	segment	req_type	s_verif_	s_verif_	a_verif_	a_verif	CCR	text	interpretatio	clarification
IMS- 1240#B	8885	_B0	mission essential	SDPS	security	analysis	un- verified	analysis	un- verified	96- 1476A	requester such information as data acquisition request confirmation or rejection, and notification of data acquisition request scheduling and completion, to include at a minimum: a. Date and time b. Instrument ID c. Data acquisition request ID d. Request status e. Implementation schedule f. If rejection, then the reason for the rejection The IMS shall be expandable to accept from the IP Information Management System or an equivalent IP facility the current data acquisition schedules and plans for U.S. instruments on foreign spacecraft, and shall make the schedules and plans accessible to authorized users on request, in accordance with	B: ASTER GDS interfaces to EDC DAAC only. For Release B, only ASTER DARs information is processed.	

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RBR_id	req_	Rel	Req_	segment	req_type	s_verif_	s_verif_		a_verif	CCR	text	interpretatio	clarification
	key		Category			method	stat	method	_stat		annliaghta MOUS	n text	
IMS- 1250#B	8887	<u>B0</u>	mission critical	SDPS	interface	analysis	un- verified	analysis	un- verified	96- 1476A	applicable MOUs. The IMS shall be expandable to forward DARs for U.S. instruments on IP spacecraft to the IP Information Management System or an equivalent IP facility, in accordance with applicable MOUs.	For Release B, only ASTER DARs information is processed.	
IMS- 1260#B	8889	<u>B0B1</u>	mission essential	SDPS	interface	test	un- verified	test	un- verified	96- 1476A	The IMS shall be expandable to provide the capability to receive, from the IP Information Management System or an equivalent IP facility, data acquisition request status in accordance with applicable MOUs and provide the status to the data acquisition requester.	B: ASTER GDS interfaces to EDC DAAC only. For Release B, only ASTER DARs information is processed.	
IMS- 1261#B	8890	<u>B1</u>	mission critical	SDPS	interface	test	un- verified	test	un- verified	96- 1476A	The IMS shall provide the capability to forward data acquisition requests to the ASTER GDS, in accordance with applicable IRDs and	For Release B, only ASTER DARs information is processed.	

RBR_id	req_	Rel	Req_	segment	req_type	s_verif_	s_verif_		a_verif	CCR	text	interpretatio	clarification
	key		Category			method	stat	method	_stat			n text	
											ICDs.		
IMS- 1262#B	8894	<u>B1</u>	mission critical	SDPS	interface	test	un- verified	test	un- verified	96- 1476A	The IMS shall provide the capability to request and receive the ASTER GDS data acquisition request status in accordance with applicable IRDs and ICDs and provide the status to the data acquisition requester.	For Release B, only ASTER DARs information is processed.	
IMS- 1270#B	5331	<u>B0B1</u>	mission essential	SDPS	interface	test	un- verified	test			The IMS shall determine the ECS elements responsible for processing and distributing, and the input data required for processing using the product thread information provided by the SMC.		
IMS- 1280#B	5333	<u>B0B1</u>	mission essential	SDPS	interface	test	un- verified	test			The IMS shall send a product order, priority, and suggested start time and completion time to the ECS elements responsible for processing and distributing a product.		
IMS- 1290#B	5334	<u>B0</u>	mission essential	SDPS	interface	test	un- verified	test			The IMS shall send		

RBR_id	req_ key	Rel	Req_ Category	segment	req_type	s_verif_ method	s_verif_ stat	a_verif_ method	a_verif stat	CCR	text	interpretatio n text	clarification
IMS- 1300#B	5336	<u>B0B1</u>	mission fulfillmen t	SDPS	functional	demo	un- verified	demo			a product order to an ADC or an ODC with the identification of the destination DADS and suggested shipping deadline for data required for product processing. The IMS shall be capable of responding to user inquiries for status of user-initiated requests, and user request		
IMS- 1310#B	8628	<u>B0</u>	mission essential	SDPS	interface	test	un- verified	test	un- verified	96- 1465B	The IMS shall provide the capability to accept, from product requesters, product distribution status requests, retrieve the request status, and display the status to the requester for an ECS, ADC, or ODC data product.	ECS will support this requirement by users contacting ops/user services who then utilize an ops MSS interface to obtain status.	
IMS- 1320#B	8898	<u>B1</u>	mission essential	SDPS	functional	test	un- verified	test	un- verified	96- 1476A	The IMS shall provide the capability to accept, from ASTER instrument data acquisition	For Release B, only ASTER DARs information is processed.	

RBR_id	req_ key	Rel	Req_ Category	segment	req_type	s_verif_ method	s_verif_ stat	a_verif_ method	a_verif _stat	CCR	text	interpretatio n text	clarification
											requesters, data acquisition status requests, retrieve the request status, and display the status to the requester.		
IMS- 1330#B	8899	<u>B1</u>	mission essential	SDPS	functional	test	un- verified	test	un- verified	96- 1476A	The IMS shall provide the capability to accept, from data processing requesters, data processing status requests, retrieve the request status, and display the status to the requester.	Interaction with user for processing status messages done by the Processing Status Dialog.	
IMS- 1340#B	5341	<u>B1</u>	mission essential	SDPS	interface	test	un- verified	test			The IMS shall, using information provided by the SMC, provide the capability for users to preview billing costs for EOSDIS data products prior to order submission.		
IMS- 1350#B	5342	<u>B1</u>	mission essential	SDPS	interface	test	un- verified	test			The IMS shall provide the capability for users to preview billing costs, which are based upon MOUs with the ADC and non-EOSDIS data centers, prior to ADC and non-		

RBR_id	req_	Rel	Req_	segment	req_type	s_verif_	s_verif_	a_verif_	a_verif	CCR	text	interpretatio	clarification
	key		Category			method	stat	method	_stat			n text	
											EOSDIS data		
											product order		
IMS-		_B1	mission	SDPS	interface	test		test			submission.		
1360#B	5343	<u>_B1</u>	essential	SDPS	Interrace	test	un- verified	test			The IMS shall		
											provide the		
											capability for users		
											to request and		
											receive the current		
											status of their account balance.		
IMS-		<u>B1</u>	mission	SDPS	interface	test	un-	test			account barance.		
1370#B	5344		essential	BDIB	Interruce	lost	verified	lost			The IMS shall		
											present account		
											status reports		
											prepared by the SMC to requesters.		
IMS-		B0B1	mission	SDPS	functional	test	un-	test			Sivie to requesters.		
1380#B	5346		fulfillmen				verified				The IMS shall		
			t								provide the		
											capability to		
											integrate the element toolkits		
											with a		
											common user		
											interface.		
IMS-	5247	<u>B1</u>	mission	SDPS	interface	test	un-	test			TEL DAG : 11.		
1385#B	5347		fulfillmen t				verified				The IMS toolkit software shall be		
											able to interactively		
											display interrupt		
											messages.		
IMS-	50.10	<u>B0</u>	mission	SDPS	interface	demo	un-	demo			m		
1400#B	5348		essential				verified				The Virtual IMS Information		
											Management		
											software shall		
											operate with a local		
											data base using an		
											ECS supported		
				1		l		1			DBMS provided by		1

RBR_id	req_	Rel	Req_	segment	req_type	s_verif_	s_verif_		a_verif	CCR	text	interpretatio	clarification
	key		Category			method	stat	method	_stat		the SCF, thereby facilitating the process of importation of the local data base into the ECS.	n text	
IMS- 1410#B	5350	<u>B0</u>	mission essential	SDPS	interface	demo	un- verified	demo			The Virtual IMS Information Management software shall provide metadata management services for local SCF metadata.		
IMS- 1420#B	5352	<u>B0</u>	mission essential	SDPS	interface	demo	un- verified	demo			The Virtual IMS Information Management software shall provide the capabilities to search the local SCF data base.		
IMS- 1430#B	5353	<u>B0B1</u>	mission essential	SDPS	interface	demo	un- verified	demo			The Virtual IMS Information Management software shall provide local interactive and batch data management capabilities to: a. Add b. Update c. Delete d. Retrieve		
IMS- 1440#B	5354	<u>B0</u>	mission essential	SDPS	security	demo	un- verified	demo			he Virtual IMS Information		

RBR_id	req_ key	Rel	Req_ Category	segment	req_type	s_verif_ method	s_verif_ stat	a_verif_ method	a_verif stat	CCR	text	interpretatio n text	clarification
	Rey		Category			methou	Stat	method	_stat		Management software shall provide local SCF data base administration utilities for, at a minimum: a. Modifying the data base schema b. Performance monitoring c. Administration of user access control d. Data base backup e. Data base recovery	II text	
IMS- 1450#B	5355	<u>B0</u>	mission essential	SDPS	interface	demo	un- verified	demo			The Virtual IMS Information Management tools shall provide the capability to modify the data base structure while adhering to established standards.		
IMS- 1460#B	5356	<u>B1</u>	mission essential	SDPS	interface	demo	un- verified	demo			The Virtual IMS Information Management software shall provide the capability to electronically load data base structures and their content.		
IMS- 1470#B	5358	<u>B0B1</u>	mission essential	SDPS	interface	demo	un- verified	demo			The Virtual IMS Information		

RBR_id	req_ key	Rel	Req_ Category	segment	req_type	s_verif_ method	s_verif_ stat	a_verif_ method	a_verif stat	CCR	text	interpretatio n text	clarification
											Management software data base management system shall provide, at a minimum, the capability to select data for retrieval by: a. Boolean operators b. Relational operators c. Attribute values d. Combinations thereof		
IMS- 1480#B	5359	<u>B0</u>	mission essential	SDPS	interface	demo	un- verified	demo			The Virtual IMS Information Management software shall allow a user to locate and identify desired data without having detailed knowledge of the systemÍs: a. Architecture b. Data base management system c. Data base structure d. Query languages e. Data formats		
IMS- 1490#B	8633	<u>B0</u>	mission essential	SDPS	functional	test	un- verified	test	un- verified	96- 1465B	The IMS toolkit software shall provide users, including those working from ICCs and ISTs, with the capability to locally construct the requests for IMS		ISTs and ICCs are done by Rel B.

RBR_id	req_ key	Rel	Req_ Category	segment	req_type	s_verif_ method	s_verif_ stat	a_verif_ method	a_verif stat	CCR	text	interpretatio n text	clarification
											services, forward the requests to the IMS server, and obtain request results.		
IMS- 1500#B	8403	<u>B0</u>	mission essential	SDPS	functional	test	un- verified	test	un- verified	96- 1479A	The IMS toolkit software shall provide the tools to support user preparation or automated generation of metadata, for example, directory, inventory, and guide (documentation/refe rence material) entries.		
IMS- 1505#B	5363	<u>B0B1</u>	mission fulfillmen t	SDPS	functional	test	un- verified	test			The IMS toolkit software shall provide the tools to simulate an on-line IMS session for training sessions.		
IMS- 1510#B	8636	<u>B0</u>	mission essential	SDPS	standards	test	un- verified	test	un- verified	96- 1465B	The IMS data visualization toolkit capabilities shall be portable and execute on ECS supported workstations and appropriate ECS facility computers.		Portability supported by binaries.
IMS- 1520#B	5366	<u>B0</u>	mission essential	SDPS	functional	test	un- verified	test			The IMS toolkit software shall		

RBR_id	req_	Rel	Req_	segment	req_type	s_verif_ method	s_verif_	a_verif_ method	a_verif	CCR	text	interpretatio	clarification
	key		Category				stat		_stat		provide data visualization tools to assist the investigators to perform the following functions, at a minimum: a. QA/Validation of products generated by the PGS b. Algorithm development c. Calibration functions, parameter verification, and anomaly detection d. View subsetted, subsampled, and summarized data whenever associated inventory information is displayed	n text	
IMS- 1530#B	8641	<u>B0</u>	mission essential	SDPS	functional	demo	un- verified	demo	un- verified	96- 1465B	The IMS data visualization toolkit shall provide the capability to visualize data in raster and vector formats and to visualize animated products.	Display 8-bit and 24-bit raster images, Latitude/Longi tude pairs	
IMS- 1540#B	8651	<u>B0</u>	mission essential	SDPS	functional	demo	un- verified	demo	un- verified	96- 1465B	The IMS toolkit software shall provide the capability to generate, at a minimum: a. Two-dimensional	Item a. provides two- dimensional color scatter plots, two- dimensional data arrays as pseudocolor	

RBR_id	req_ key	Rel	Req_ Category	segment	req_type	s_verif_ method	s_verif_ stat	a_verif_ method	a_verif stat	CCR	text	interpretatio n text	clarification
	Rey					methou	State	method	_9444		plots (x-y plots, scatter plots, profiles, histograms) b. Three- dimensional plots c. Contour plots d. Three- dimensional surface diagrams	images.	
IMS- 1550#B	8654	<u>B0B1</u>	mission essential	SDPS	functional	demo	un- verified	demo	un- verified	96- 1465B	The IMS toolkit data visualization tools shall provide capabilities for image manipulation (e.g., pan, zoom, color, contrast).	Selecting color, zooming and panning for pseudocolor visualizations; zooming and panning for raster images.	
IMS- 1570#B	8901	<u>B0B1</u>	mission essential	SDPS	functional	test	un- verified	test	un- verified	96- 1476A	The IMS toolkit software shall provide statistical analysis capabilities.	Basic statistical analysis features (e.g. min, max, average, std dev) will be integrated into the visualization toolkit (EOS View). For full-blown capabilities, a COTS, IMSL, is provided to the DAAC by PGS.	
IMS- 1590#B	5373	<u>B0</u>	mission essential	SDPS	functional	test	un- verified	test			The IMS toolkit data visualization tools shall provide capabilities for	B: Support image reprojections	

RBR_id	req_ key	Rel	Req_ Category	segment	req_type	s_verif_ method	s_verif_ stat	a_verif_ method	a_verif stat	CCR	text	interpretatio n text	clarification
											sizing and positioning the cursor by: a. Earth coordinates b. Image coordinates c. Instrument scan- line coordinated		
IMS- 1600#B	8655	<u>B0</u>	mission essential	SDPS	interface	demo	un- verified	demo	un- verified	97- 0399A	The IMS shall provide access to the following communication services at a minimum: a. File transfer b. Multi media mail c. Remote log-on d. Electronic Bulletin Board e. Access to other networks		Access achieved by GUI icons. Communicat ion services achieved with ESN- 0280#B, ESN- 0010#B, ESN- 1180#B, ESN- 10080#B requirements
IMS- 1620#B	5375	<u>B0B1</u>	mission essential	SDPS CSMS	functional	test	un- verified	test			The IMS element shall collect the management data used to support the following system management functions: a. Fault Management b. Configuration Management c. Accounting Management d. Accountability Management e. Performance Management		

RBR_id	req_	Rel	Req_	segment	req_type	s_verif_	s_verif_	a_verif_	a_verif	CCR	text	interpretatio	clarification
	key		Category			method	stat	method	_stat			n text	
											f. Security		
											Management		
											g. Scheduling		
											Management		
IMS-	505 6	<u>B0B1</u>	mission	SDPS	security	demo	un-	demo			T 73.60 1 11		
1630#B	5376		fulfillmen				verified				The IMS shall		
			t								provide the		
											capability to		
											receive from the		
											SMC, directives to		
											include at a		
											minimum:		
											a. Directives for		
											integration, testing,		
											and simulation		
											b. Maintenance		
											directives		
											 c. Configuration 		
											management		
											directives		
											d. Logistics		
											management		
											directives		
											e. Training		
											management		
											directives		
											f. Fault		
											management		
											directives		
											g. Security		
											directives		
IMS-		<u>B0B1</u>	mission	SDPS	interface	demo	un-	demo					
1640#B	5377		fulfillmen				verified				The IMS shall		
			t								provide to the SMC,		
											status to include at		
											a minimum:		
											a. Integration,		
											testing, and		
											simulation status		
											b. Maintenance		
1									1		status		1

RBR_id	req_ key	Rel	Req_ Category	segment	req_type	s_verif_ method	s_verif_ stat	a_verif_ method	a_verif _stat	CCR	text	interpretatio n text	clarification
											c. Logistics status d. Training information		
IMS- 1645#B	8656	<u>B0B1</u>	mission fulfillmen t	SDPS	interface	demo	un- verified	demo	un- verified	96- 1465B	The IMS shall accept from the users and output to the SMC, user feedback information, which shall contain the following at a minimum: a. Product data quality assessment b. Schedule performance assessment c. Evaluation of quality of ECS service	User comments are free form text.	User feedback shall be comments (i.e., freeform text) only.
IMS- 1646#B	5379	<u>B0</u>	mission fulfillmen t	SDPS	interface	demo	un- verified	demo			The IMS shall provide to the SMC a record of data orders for the purposes of maintaining a full and complete history of all data orders.		
IMS- 1650#B	8384	<u>B0B1</u>	mission essential	SDPS	functional	test	un- verified	test	un- verified	96- 1344A	IMS operations data shall contain information on: a. System utilization at the IMS b. Outstanding data distribution requests c. Outstanding		

RBR_id	req_	Rel	Req_	segment	req_type		s_verif_		a_verif	CCR	text	interpretatio	clarification
	key		Category			method	stat	method	_stat			n text	
											processing requests		
											d. Outstanding data		
			<u> </u>		<u> </u>						acquisition requests		
IMS-		<u>B0B1</u>	mission	SDPS	interface	test	un-	test					
1660#B	5381		essential				verified				The IMS shall		
											provide to the SMC		
											a full and complete		
											history of all IMS		
											resources used by		
											science		
											investigators including, at a		
											minimum:		
											a. CPU utilization		
											b. Amount of user		
											storage		
											c. Connect time		
											d. Session histories		
IMS-		B0B1	mission	SDPS	interface	test	un-	test			a. Session instances		
1665#B	5382	<u>_Bob1</u>	fulfillmen	SDIS	Interface	test	verified	test			he IMS shall		
1005#1	3302		t				Vermed				provide to the SMC,		
											IMS services usage		
											by each user (to		
											include		
											at a minimum user		
											name, IMS service		
											identification,		
											date/time stamp,		
											time		
											expended, facilities		
											used) for later		
											reporting and		
											determination of		
D 40		D.1	 	ap.r.«							access patterns.		
IMS-	5202	<u>B1</u>	mission	SDPS	functional	demo	un-	demo			TI DIG		
1680#B	5383		essential				verified				The IMS status		
											monitoring function		
											shall provide the		
											capability to		
											distribute		
											reports on a periodic		

RBR_id	req_ key	Rel	Req_ Category	segment	req_type	s_verif_ method	s_verif_ stat	a_verif_ method	a_verif _stat	CCR	text	interpretatio n text	clarification
											basis to a predefined list of report recipients.		
IMS- 1690#B	5397	<u>B0B1</u>	mission essential	SDPS	functional	demo	un- verified	demo			The IMS status monitoring function shall provide the capability to disseminate reports on-line electronically and off-line on either paper or electronic media.		
IMS- 1700#B	8657	<u>B0B1</u>	mission essential	SDPS	functional	test	un- verified	test	un- verified	96- 1465B	The IMS shall provide the capability to generate reports on: a. The backlog of data distribution requests b. The backlog of processing requests c. The backlog of data acquisition requests d. Data quality assessment e. Daily IMS operations summaries f. IMS performance summaries		Core metadata includes the quality assessment data.
IMS- 1710#B	5385	<u>B0</u>	mission essential	SDPS	functional	test	un- verified	test			The IMS shall provide the capability to produce reports that correlate science data to associated:		

RBR_id	req_ key	Rel	Req_ Category	segment	req_type	s_verif_ method	s_verif_ stat	a_verif_ method	a_verif stat	CCR	text	interpretatio n text	clarification
	•		g v						_		a. Calibration data b. Navigation data c. Instrument engineering data		
IMS- 1720#B	5386	<u>B0</u>	mission essential	SDPS	functional	test	un- verified	test			The IMS shall provide the capability to produce reports that relate data sets to: a. Processing algorithms used for data generation at the PGS b. Software used for data generation at the PGS c. Parameters used for data generation at the PGS d. Data recipients		
IMS- 1730#B	5387	<u>B0</u>	mission essential	SDPS	functional	test	un- verified	test			The IMS shall provide the capability to produce reports that trace the data product back to the source instrument. \\871\\		
IMS- 1740#B	5388	<u>B0</u>	mission essential	SDPS	functional	test	un- verified	test			The IMS shall produce cross reference reports (by user and data set) of processing performed, data sets produced, supporting data used, and data		

RBR_id	req_	Rel	Req_	segment	req_type	s_verif_	s_verif_	a_verif_	a_verif	CCR	text	interpretatio	clarification
	key		Category		1=31	method	stat	method	_stat			n text	
											recipient.		
IMS- 1760#B	5389	<u>B0</u>	mission essential	SDPS	functional	demo	un- verified	demo			The IMS shall send detected hardware faults to the SMC, to include at a minimum: a. IMS processors b. IMS network interfaces c. Storage devices		
IMS- 1765#B	8182	<u>B0B1</u>	mission essential	SDPS	functional	test	un- verified	test	un- verified	96- 1226	The IMS shall be developed with configuration-controlled application programming interfaces (APIs) that will be capable of supporting development of the following extensions to the ECS IMS by the DAACs, ECS and other users: a. Addition of metadata fields that are unique to the data maintained at a specific DAAC b. Addition of documents for use as guide metadata for DAAC-specific data products c. Development of DAAC-specific data		

RBR_id	req_ key	Rel	Req_ Category	segment	req_type	s_verif_ method	s_verif_ stat	a_verif_ method	a_verif stat	CCR	text	interpretatio n text	clarification
											acquisition request utilities d. Support of data visualization utilities for DAAC-specific products e. Support of DAAC-specific data analysis utilities f. Development of DAAC-unique metadata search and access services that will operate independent of the delivered ECS IMS services g. Development of a local user interface that can bypass the delivered ECS user interface for accessing DAAC-unique metadata search and access services		
IMS- 1780#B	5391	<u>B0B1</u>	mission essential	SDPS	performan ce	test	un- verified	test	un- verified	97- 0340C	The IMS shall respond to each user session operation within the time period specified in Table 7-4 with the specified rate of IMS operations.		
IMS- 1785#B	5392	<u>B1</u>	mission essential	SDPS	performan ce	test	un- verified	test			The IMS performance specified in Table 7-4 shall be		

RBR_id	req_ key	Rel	Req_ Category	segment	req_type	s_verif_ method	s_verif_ stat	a_verif_ method	a_verif stat	CCR	text	interpretatio n text	clarification
IMS-	Rey	B0	mission	SDPS	performan	test		test	stat		maintained during other IMS operational activities such as database updates from the DADS.	II text	
1790#B	5393		critical		ce		un- verified				The IMS shall provide, based upon the data model defined in Appendix C, sufficient storage for, at a minimum: a. Directory metadata b. Guide (documentation/reference material) metadata c. Inventory metadata d. System space, LSM data, and data base system overhead e. Metadata staging area f. Spacecraft housekeeping and ancillary data metadata g. Science processing library software metadata h. Summary data statistics i. User workspace		
IMS- 1800#B	5394	<u>B0B1</u>	mission fulfillmen t	SDPS	evolvable	analysis	un- verified	analysis			The IMS design and implementation		

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RBR_id	req_ key	Rel	Req_ Category	segment	req_type	s_verif_ method	s_verif_ stat	a_verif_ method	a_verif stat	CCR	text	interpretatio n text	clarification
190			our gozy								shall have the flexibility to accommodate 100% expansion in processing and storage capacity without major changes to the IMS hardware and software design. This expansion capacity shall apply to the total at-launch requirement plus the yearly product growth requirement specified in Appendix C.		
189		_											